ON A DEVONIAN FOSSIL ALLIED TO WORTHENIA (DE KONINCK) FROM NEW SOUTH WALES.

PLATE IX., FIGS. 1 AND 2.

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This note accompanies the drawings of a probably new fossil from the Devonian limestone of New South Wales.

It has been found among a number of fossils from the Murrumbidgee limestone, which were collected in 1881, by Mr. Chas. Jenkins, author of a note on the Geology of Yass Plains. (1)

Among some fossil Gasteropods, such as Loxonema anglicum, Euomphalus Bigsbyi, Murchisonia Verneuiliana, M. turris, which occur, together with a few corals, Canites, Billingsia, &c., described by Prof. de Koninck as Devonian, there are some undescribed Gasteropods. All these fossils are silicified, showing themselves in relief on the weathered surface of the limestone. One of them was obtained in an acceptable condition by dissolving the most part of the limestone in hydrochloric acid.

WORTHENIA? (De Koninck .) Sp. nov.

This Gasteropod is interesting from the fact of its close relation with a new genus recently made out of Pleurotomaria and other genera, by Prof. de Koninck. (2)

This paleontologist acknowledges, in the carboniferous limestone of Belgium, eleven genera in the family Haliotida. Besides the species maintained in the old genera Polytremaria, Murchisonia, Ptychomphalus and Porcellia, he creates seven new genera out of some Turbo, Trochus, Pleurotomaria, Murchisonia, &c. These genera are Gosseletia, Worthenia, Baylea, Mourlonia, Agnesia, Rhineoderma and Luciella.

One of them, the genus Mourlonia, has an extensive synonymy being formed out of five genera, including Helix and Euomphalus.

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⁽¹⁾ Explor. of the Caves and Rivers of N.S.W., 1882, and Proc. Lin. Soc., N.S.W., 1879, pp. 21 and 216.(2) L. G. de Koninck. Faune du Calc, Carb. de la Belg., 1883, 4th Part,

The author describes five species of Worthenia, two of which are from America, whilst four belong to the carboniferous of Belgium.

He differenciates this genus from the others belonging to the same family by the following characters:—

"The angular shape of the whorls, the small width of the band ('bande') of the sinus, comparatively to the size of the species, by the position of this band on the angle of the whorls and its crenulated form." And he adds:

"I don't know any other species in the lower paleozoics that can be referred to this genus."

The want of paleontological works is not very favourable to a further inquiry on the subject. The best marked character which seems to associate the specimen referred to, with Prot. de Koninck's new genus, is the crenulated nature of the periphery.

In short the only specimen in the Museum, can be sketched as follows: Height of spire about 10th inch; width about 10th inch. Shell conical, turriculate, whorls 6 or 8 (?) angular and crenulated on the periphery. Sinus not known, the mouth being broken: mouth slightly polygonal. Number of crenulations in the last half whorl above the periphery about six, large and long, conical; number of crenulations in the centre about eight, narrow; below the periphery crenulations lose and indistinct.

The suture which, in the upper whorls corresponds with the last loosely crenulated border does not show any ornament. Apical angle from 64 to 70° according to position, difficult to appreciate in consequence of the imperfection of the specimen and the size of the ornaments.

If we compare this short description with the five species described by de Koninck, we find a great difference in the crenulations, some of the species from America and Belgium presenting in the last half whorl, 50-60 crenulations above the periphery, while there are only six in the Australian specimen.

Prof. de Koninck's new genera seem to be very closely related to each other, and according to this system one would probably make a new genus of the present fossil, but I will not take the responsibility of it until further works on the subject can be consulted.